

Ghennadii Snegiryev



HOW COLOR PROTECTS WILDLIFE

MALYSH PUBLISHERS





You are walking in the woods and hear only rustling and chirping. But invisible eyes are watching you and ears are listening. No living creatures are to be seen, but they are all here. Why cannot you see them then?

You will discover the secret after you read this book and look at the pictures in it.





THE WHITE HARE

The hare has a lot of enemies. Among these are foxes, wolves and hunting dogs. And still there are many hares around because the hare is grayish-brown in summer and white in winter.

As soon as the first snow falls the hare sheds its gray coat and becomes as white as a snowball. In a snow-covered field the fox cannot spot a white hare. Before the fox can make out in which direction the hare's tracks lead, the hare is already nibbling at a young aspen tree in another grove.

But sometimes the hare is really in trouble. Winter has come, snow has fallen, and suddenly there is a thaw and the snow disappears. Now on the black fields the hare can be seen from afar. So it has to hide in a thicket and wait until snowstorms make the ground white again.





THE WILLOW PTARMIGAN

Willow ptarmigans live in the northern plain. In the winter you can see them dropping from branches and burying themselves in the snow. On the trees they peck at buds, and under the snow they look for frozen berries and take shelter in snowstorms. The willow ptarmigan is all white in the winter except for its eyebrows, which are bright red like two crushed cranberries.

When spring comes and warm winds blow and the snow starts to melt and wild geese fly over the northern plain to the shores of the Arctic Ocean, the willow ptarmigan gets all dressed up. Its neck and breast turn rusty-red, the color of old grass on hummocks. The male birds sit on the larger hummocks and cry 'Cavarra-cavarra-coka. Don't come near my house.' If a rival does come near, there is a fight. The two birds ruffle their tail feathers, hurl themselves at each other and collide in midair. Feathers fly in all directions.

In summer the willow ptarmigan again changes its dress. The northern plain is a colorful sight with its flowers, clumps of moss and patches of brown grass. The bird's dress is of the same colors.

The willow ptarmigan has three dresses, for winter, spring and summer. And each protects it. Only when you come close to the bird can you see it.





THE GROUSE

The grouse is a reddish-brown speckled bird. Hunters know that it is very difficult to spot it. It may be chirping overhead but you cannot see it among the leaves. And if it is a baby grouse and on the ground, it is impossible to see it.

The baby grouse is all speckled with a stripe down the back, and it flattens itself among the leaves and closes its eyes. It may be a bird or a leaf. It does not stir until you go away. Then the mother grouse gives a thin whistle, and the little bird, obeying her command, rushes to her side.

Even a fox cannot find baby grouse when they hide.







THE BITTERN

The bittern is a night bird. At night it wades through the reedy swamps looking for fish, frogs and water bugs, and in the day it stands upright on one leg in the reeds with feathers all ruffled up, waiting for night to come.

In the daytime the bittern may be attacked by a hawk or a harrier, or a fox may creep up on it. It does not like to fly, and usually hides in the reeds. If you spot the bittern and go up to it, it will not fly away like other birds. It will draw its feathers closer, stretch its neck out and become real thin. You can even pull it to yourself by the neck, and when you let go, it will swing back. The bittern looks like last-year's brown reed.

At night in the spring the bittern sings its song. It puts its bill in the water and blows out air. This booming cry can be heard in the nearby village. For this reason Russians call it the water bull.





THE USSURI TIGER

Long, long ago in what is now the Soviet Far East it was as hot as in a jungle. When the climate turned colder, all the animals went south, but the tiger stayed behind.

Against the white snow of the Ussuri forest the tiger stands out like a flame. For this reason it hunts when night falls. Then it cannot be seen.

In summer the Ussuri tiger hunts in the daytime.



It hides in the reeds near a watering-place and waits till a deer comes to drink. Then it attacks. The reeds conceal the tiger because its coat is striped. It is hard to say what are tiger stripes and what are reeds. That is why Nature made the tiger striped.

The tiger knows that it cannot be seen in summer. So it comes up close to places where people live and steals dogs. And if hunters are following the tiger through the reeds, it circles and comes up behind them just like a cat.



THE SANDPIPER

There are many little pebbles on the shore, round and smooth and bright-colored. Some are red and some are all white.

All birds build nests, but the sandpiper lays its eggs among the pebbles. You cannot tell where the pebbles are and where the eggs.

If you walk along the shore, you can see the sandpipers darting here and there and hear their anxious cries. And you cannot understand what the trouble is.

But after two weeks the eggs hatch out and the little sandpipers stand like tiny balls of feathers on long legs. Now you cannot see them at all because they are as brightly colored as the pebbles on the shore. You cannot tell where the pebbles are and where the sandpipers.





THE SEA HORSE

The sea horse lives near the shore among sea weeds. It fastens itself to a weed by its tail and rocks back and forth, back and forth, together with the tide.

When the sun reaches the weeds, they turn green, and the sea horse turns green, too. And when the sun sets, the weeds become brown, and the sea horse turns brown. You can never see it in the sea weeds even if you try.

In the spring, when the water gets warm, the sea horse lays eggs. The father sea horse hides them in a tiny pocket on his stomach. At such a time no enemy fish can see it because it is protecting the eggs as well as itself. The father sea horse keeps the eggs in the pocket until the fry hatch and learn to attach themselves by their tails to the weeds and rock back and forth, back and forth, together with the tide.



THE FLATFISH

Out at sea, too, fishes camouflage themselves. Let me tell you about the flatfish. This fish is round and as flat as a pancake, and its eyes are on the back of its head so that it can see fish that prey on it.

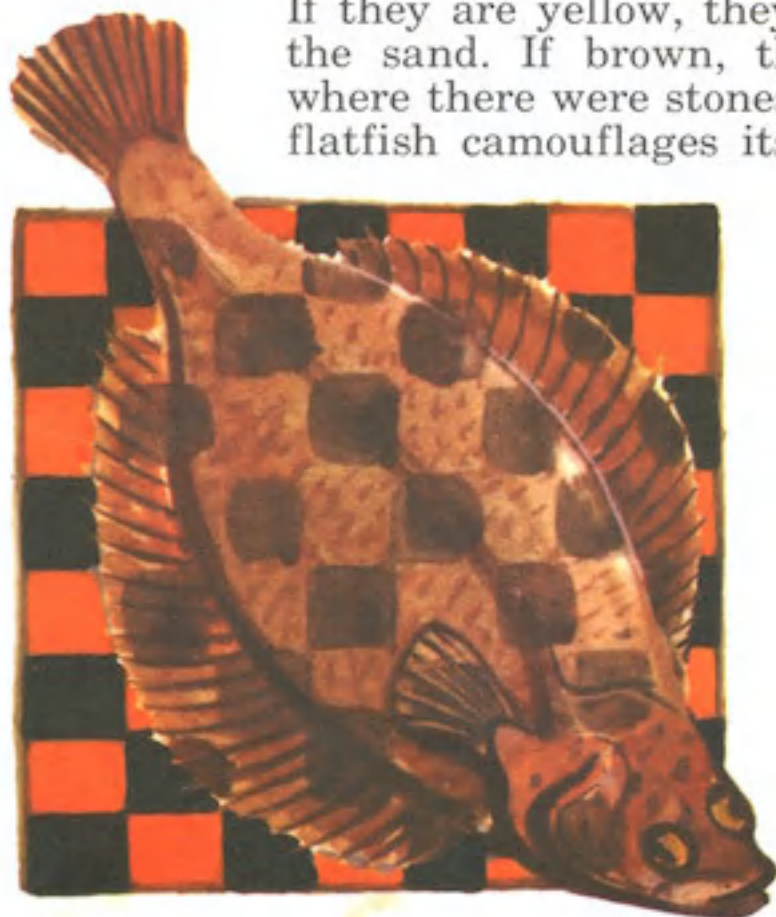
The enemy fish have a hard time finding the flatfish. The wolffish, for one, may swim right past it and not notice it because the sand of the seabed is yellow and so is the flatfish.

When the flatfish is looking for food among the stones on the bed, which are gray, it turns gray, too.

Once an experiment was tried. A checkerboard was placed in an aquarium with a flatfish. The flatfish thought a little and changed its coloring to look like a checkerboard.

The flatfish sold at shops are often of different colors because they were caught in different places.

If they are yellow, they were caught on the sand. If brown, they were caught where there were stones. This is how the flatfish camouflages itself.





THESE, TOO, ARE PROTECTED BY COLOR

TREE FROG



PRAYING MANTIS



SNOW BUNTING



PIPEFISH



KALLIMA

You are walking in the woods and hear only rustling and chirping. But invisible eyes are watching you and ears are listening, though no living creatures are to be seen.

Color protects wildlife from its enemies.





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